

CURRENT CLAIMS SCHEDULE:

1 1. (Currently Amended) A system for providing redundancy for telecommunication
2 switches (telecom switches) receiving control signal data from a control network and
3 bearer traffic data from a bearer traffic network, said system comprising:

4 a primary telecom switch, said primary telecom switch having a primary I/O
5 board for transmitting and receiving data, said primary I/O board having communicating
6 relationships through: i) a control signal connection; ii) a bearer traffic connection; and
7 iii) a primary redundancy connection, said primary telecom switch having a primary
8 processing board for processing said data; and

9 a secondary telecom switch, said secondary telecom switch having a secondary
10 I/O board for transmitting and receiving data, said secondary I/O board having communi-
11 cating relationships through: i) a control signal connection; and ii) a secondary redun-
12 dancy connection in communicating relationship with said primary redundancy connec-
13 tion, said secondary telecom switch having a secondary processing board for processing
14 said data, wherein said secondary telecom switch assumes the role of said primary tele-
15 com switch in the event that said primary processing board becomes unavailable, said
16 secondary telecom switch communicating with said bearer traffic network through said
17 primary and secondary redundancy connections and said primary I/O board instead of
18 said secondary I/O board.

1 2. (Previously Presented) The system as in claim 1, wherein said telecom switches are
2 converged services platforms (CSPs).

1 3. (Previously Presented) The system as in claim 1, wherein said bearer traffic network
2 is a circuit-switched public switched telephone network (PSTN).

- 1 4. (Previously Presented) The system as in claim 1, wherein said bearer traffic network
2 is a packet-switched Internet Protocol (IP) network.
- 1 5. (Currently Amended) The system as in claim 1, wherein said bearer traffic ~~connec-~~
2 ~~tions are~~ connection is a port type selected from the group consisting of: T1, E1, J1, and
3 DS3.
- 1 6. (Currently Amended) The system as in claim 1, further comprising: a memory storing
2 programming to delineate port types of said bearer traffic ~~connections~~ connection.
- 1 7. (Currently Amended) The system as in claim 1, wherein said ~~redundancy connection~~
2 ~~comprises~~ primary and secondary redundancy connections communicate via one or more
3 cables.
- 1 8. (Currently Amended) The system as in claim ~~1~~ 7, wherein said ~~redundancy connection~~
2 ~~is~~ one or more cables are keyed to prevent improper engagement.
- 1 9. (Currently Amended) The system as in claim ~~1~~ 7, further comprising: a connection
2 detect signal provided on said ~~redundancy connection~~ one or more cables, which indi-
3 cates the availability of connection between said primary and secondary telecom
4 switches.
- 1 10. (Currently Amended) The system as in claim 9, wherein said primary telecom
2 switch asserts mastership in the event of an interruption of said connection detect signal
3 ~~indicates~~ indicating an unavailable connection.

1 11. (Currently Amended) The system as in claim 9, wherein said secondary telecom
2 switch releases mastership in the event of an interruption of said connection detect signal
3 ~~indicates~~ indicating an unavailable connection.

1 12. (Currently Amended) The system as in claim 49, ~~further comprising: a connection~~
2 ~~detect signal located on said redundancy connection, wherein said redundancy connection~~
3 ~~comprises one or more cables, and~~ wherein said connection detect signal is provided on
4 substantially all of said one or more ~~redundancy connection~~ cables.

1 13. (Previously Presented) The system as in claim 1, wherein said secondary telecom
2 switch receives bearer traffic data regardless of whether said primary telecom switch is
3 available or unavailable.

1 14. (Previously Presented) The system as in claim 1, further comprising: unique identi-
2 fications (IDs) on each of said primary and secondary processing and I/O boards.

1 15. (Previously Presented) The system as in claim 14, wherein said IDs are used for sys-
2 tem configuration.

1 16. (Previously Presented) The system as in claim 14, wherein said IDs are used for
2 product verification.

1 17. (Previously Presented) The system as in claim 14, wherein said IDs are used for li-
2 censing purposes.

1 18. (Previously Presented) The system as in claim 1, further comprising: a mastership
2 signal communicated between said primary and secondary telecom switches.

1 19. (Previously Presented) The system as in claim 18, wherein said secondary telecom
2 switch asserts mastership in the event that said mastership signal indicates that said pri-
3 mary telecom switch is unavailable.

1 20. (Currently Amended) The system as in claim 1, wherein each of said primary and
2 secondary telecom switches ~~are is~~ configured to issue a request for mastership, check for
3 adjacent masters, and, if ~~sea master is found~~, enter a pending state until releasing said re-
4 quest, and if ~~not a master is not found~~, assert mastership.

1 21. (Currently Amended) The system as in claim 20, ~~further comprising wherein each of~~
2 said primary or secondary telecom switches includes: an arbitration timer, ~~said requesting~~
3 ~~switch waiting for said arbitration timer to expire prior to asserting which must expire~~
4 before the associated switch asserts mastership.

1 22. (Previously Presented) The system as in claim 21, wherein said primary telecom
2 switch has an arbitration timer that is set at less time than an arbitration timer of said sec-
3 ondary telecom switch.

1 23. (Currently Amended) A method for providing redundancy for telecommunication
2 switches (telecom switches) said method comprising the steps of:

3 communicating, at a primary and secondary telecom switch, control signal data
4 with a control network over primary and secondary control signal connections on a pri-
5 mary and secondary I/O board, respectively;

6 communicating, at said primary telecom switch, bearer traffic data with a bearer
7 traffic network over primary bearer traffic connections on said primary I/O board;

8 communicating, at said secondary telecom switch, bearer traffic data with said
9 bearer traffic network over a secondary redundancy connection on said secondary I/O

10 board in communicating relationship with a primary redundancy connection on said pri-
11 mary I/O board;

12 processing said control signal data and said bearer traffic data on a primary and
13 secondary processing board on said primary and secondary telecom switches, respec-
14 tively; and

15 in the event that said primary processing board becomes unavailable, assuming, at
16 said secondary telecom switch, the role of said primary telecom switch, said secondary
17 telecom switch communicating with said bearer traffic network through said primary and
18 secondary redundancy connections and said primary I/O board instead of said secondary
19 I/O board.

1 24. (Previously Presented) The method as in claim 23, wherein said telecom switches
2 are converged services platforms (CSPs).

1 25. (Previously Presented) The method as in claim 23, wherein said bearer traffic net-
2 work is a circuit-switched public switched telephone network (PSTN).

1 26. (Previously Presented) The method as in claim 23, wherein said bearer traffic net-
2 work is a packet-switched Internet Protocol (IP) network.

1 27. (Currently Amended) The method as in claim 23, wherein said bearer traffic ~~connec-~~
2 ~~tions are~~ connection is a port type selected from the group consisting of: T1, E1, J1, and
3 DS3.

1 28. (Currently Amended) The method as in claim 23, further comprising the step of: de-
2 lineating port types of said bearer traffic ~~connections~~ connection with programming
3 stored on a memory.

1 29. (Currently Amended) The method as in claim 23, wherein said ~~redundancy connec-~~
2 ~~tion comprises communicating at said second telecom switch occurs over one or more ca-~~
3 ~~bles.~~

1 30. (Currently Amended) The method as in claim 23, wherein said ~~redundancy connec-~~
2 ~~tion is keyed~~29, including the step of keying said one or more cables to prevent improper
3 engagement.

1 31. (Currently Amended) The method as in claim ~~23~~29, further comprising the step of:
2 communicating a connection detect signal over said ~~redundancy connection~~one or more
3 cables, which indicates the availability of connection between said primary and second-
4 ary telecom switches.

1 32. (Currently Amended) The method as in claim 31, further comprising the step of: as-
2 serting mastership at said primary telecom switch in the event of an interruption of said
3 connection detect signal ~~indicates~~indicating an unavailable connection.

1 33. (Currently Amended) The method as in claim 31, further comprising the step of: re-
2 leasing mastership at said secondary telecom switch in the event of an interruption of said
3 connection detect signal ~~indicates~~indicating an unavailable connection.

1 34. (Currently Amended) The method as in claim 23, ~~further comprising the step of:~~
2 ~~communicating a connection detect signal over said redundancy connection, wherein said~~
3 ~~redundancy connection comprises one or more cables, and~~31, wherein said connection
4 detect signal is communicated over substantially all of said one or more ~~redundancy con-~~
5 ~~nection~~ cables.

- 1 35. (Previously Presented) The method as in claim 23, further comprising the step of:
2 receiving bearer traffic data at said secondary telecom switch regardless of whether said
3 primary telecom switch is available or unavailable.
- 1 36. (Previously Presented) The method as in claim 23, further comprising the step of:
2 providing unique identifications (IDs) on each of said primary and secondary processing
3 and I/O boards.
- 1 37. (Previously Presented) The method as in claim 36, further comprising the step of:
2 using said IDs for system configuration.
- 1 38. (Previously Presented) The method as in claim 36, further comprising the step of:
2 using said IDs for product verification.
- 1 39. (Previously Presented) The method as in claim 36, further comprising the step of:
2 using said IDs for licensing purposes.
- 1 40. (Previously Presented) The method as in claim 23, further comprising the step of:
2 communicating a mastership signal between said primary and secondary telecom
3 switches.
- 1 41. (Previously Presented) The method as in claim 40, further comprising the step of:
2 asserting mastership at said secondary telecom switch in the event that said mastership
3 signal indicates that said primary telecom switch is unavailable.
- 1 42. (Previously Presented) The method as in claim 23, further comprising the steps of:
2 issuing a request for mastership;
3 checking for adjacent masters; and

4 if a master is found, entering a pending state until releasing said request, and if no
5 master is found, asserting mastership.

1 43. (Previously Presented) The method as in claim 42, further comprising the step of:
2 waiting for an arbitration timer to expire prior to asserting mastership.

1 44. (Previously Presented) The method as in claim 43, wherein said primary telecom
2 switch has an arbitration timer that is less time than an arbitration timer of said secondary
3 telecom switch.

1 45. (Currently Amended) A system for providing redundancy for telecommunication
2 switches (telecom switches) receiving control signal data from a control network and
3 bearer traffic data from a bearer traffic network, said system comprising:

4 means for communicating, at a primary and secondary telecom switch, control
5 signal data with a control network over primary and secondary control signal connections
6 on a primary and secondary I/O board, respectively;

7 means for communicating, at said primary telecom switch, bearer traffic data with
8 a bearer traffic network over primary bearer traffic connections on said primary I/O
9 board;

10 means for communicating, at said secondary telecom switch, bearer traffic data
11 with said bearer traffic network over a secondary redundancy connection on said second-
12 ary I/O board in communicating relationship with a primary redundancy connection on
13 said primary I/O board;

14 means for processing said control signal data and said bearer traffic data on a pri-
15 mary and secondary processing board on said primary and secondary telecom switches,
16 respectively; and

17 in the event that said primary processing board becomes unavailable, means for
18 assuming, at said secondary telecom switch, the role of said primary telecom switch, said
19 secondary telecom switch communicating with said bearer traffic network through said

20 | primary and secondary redundancy connections and said primary I/O board instead of
21 | said secondary I/O board.